

SKILLS TRANSFERABILITY

Metal Products Assembler to HVAC-R Mechanic

**Are you a metal products assembler?
Are you looking for a new employment opportunity?**

You have skills and experience that can provide a jumping-off point to a career as a heating, ventilation, air conditioning and refrigeration (HVAC-R) mechanic.

Take a look at the information below to see how you could leverage your skills and, with some additional training, transition into this growing occupation.



Metal Products Assembler

Heating, Ventilation, Air Conditioning and Refrigeration (HVAC-R) Mechanic

OVERVIEW

Workers in this occupation assemble a wide variety of mechanical products such as trucks, buses, snowmobiles, garden tractors, automotive engines, transmissions, outboard motors, gearboxes, hydraulic pumps and sewing machines.

Heating, ventilation, air conditioning and refrigeration mechanics install, maintain, repair and overhaul heating, ventilation, air conditioning and refrigeration systems.



Metal Products Assembler

Heating, Ventilation, Air Conditioning and Refrigeration (HVAC-R) Mechanic

EXAMPLE JOB TITLES

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| <ul style="list-style-type: none"> • Automotive Engine Assembler • Garden Machinery Assembler • Gearbox Assembler • Hydraulic Hoist Assembler • Sewing Machine Assembler | <ul style="list-style-type: none"> • Truck Assembler • Tractor Assembler • Transmission Assembler • Mechanical Assembler | <ul style="list-style-type: none"> • Heating and Cooling Mechanic • Heating, Ventilation and Air Conditioning (HVAC) Mechanic • Transport Refrigeration Mechanic | <ul style="list-style-type: none"> • Commercial Air Conditioning Mechanic • Refrigeration and Air Conditioning Mechanic Apprentice • Central Air Conditioning Mechanic |
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EMPLOYMENT REQUIREMENTS

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| <ul style="list-style-type: none"> • Some secondary school education is required. • On-the-job training is typically provided. • Experience as a mechanical assembler may be required for inspectors in this unit group. | <ul style="list-style-type: none"> • Completion of secondary school is usually required. • Trade certification for refrigeration and air conditioning mechanics is compulsory in Nova Scotia, New Brunswick, Quebec, Ontario, Manitoba, Saskatchewan and Alberta and voluntary in all other provinces and the territories. |
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EARNINGS

Across Canada, average earnings for *Mechanical assemblers and inspectors* range from:

\$15.00 to \$30.00
per hour (Job Bank)



Across Canada, average earnings for *Heating, refrigeration and air conditioning mechanics* range from:

\$18.00 to \$48.00
per hour (Job Bank)

INDUSTRIES

- | | |
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| <ul style="list-style-type: none"> • Manufacturing • Construction • Wholesale Trade • Repair, Personal and Non-Profit Services • Retail Trade | <ul style="list-style-type: none"> • Building equipment contractors • Direct selling establishments • Hardware and plumbing and heating equipment and supplies merchant wholesalers • Commercial and industrial machinery and equipment repair and maintenance. |
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NATIONAL OCCUPATIONAL CLASSIFICATION

NOC 9526: *Mechanical assemblers and inspectors*

NOC 7313: *Heating, refrigeration and air conditioning mechanics*

Transferable Skills



Both metal products assemblers and HVAC-R mechanics:

- read and interpret technical resources
- monitor equipment and evaluate performance of their machines
- use testing equipment to conduct regular mechanical tests
- uphold Occupational Health and Safety Regulations

Skills Gap



HVAC-R mechanics need to be able to:

- install and maintain electrical and electronic equipment
- install heating boilers and furnaces
- install HVAC ducts
- install ventilation equipment
- handle refrigerant transfer pumps
- ensure compliance with environmental legislation



Additional training is required for metal product assemblers seeking to become heating, ventilation, air conditioning and refrigeration technicians:

Examples of one-year programs:

- <https://www.nait.ca/programs/hvac-refrigeration-technician?term=2021-fall>
- <https://www.algonquincollege.com/acce/program/heating-refrigeration-and-air-conditioning-technician/>
- <https://durhamcollege.ca/programs/heating-ventilation-and-air-conditioning-techniques-hvac>

Examples of multi-year programs:

- <https://www.bcit.ca/programs/heating-ventilation-air-conditioning-and-refrigeration-technician-diploma-full-time-cooperative-education-2990tttdipl/>
- <https://www.sait.ca/apprenticeships-and-trades/apprenticeship-and-pre-employment-programs/apprenticeships/refrigeration-and-air-conditioning-mechanic>

Employment Outlook

Approximately 9,000 job openings are forecasted for *Refrigeration and air conditioning mechanics; machine fitters & elevator constructors and mechanics* over the period 2022-2028 (Canadian Occupational Projection System).

The employment outlook for *Heating, refrigeration and air conditioning mechanics* for the 2019-2021 period is **GOOD** in British Columbia, Ontario and Prince Edward Island and **FAIR** in Alberta, Saskatchewan, Quebec, New Brunswick, Nova Scotia and Newfoundland and Labrador ([Job Bank](#)).



Do you want to learn more about Refrigeration and Air Conditioning Mechanics?

- **The Heating, Refrigeration and Air Conditioning Institute of Canada (HRAI):** <https://www.hrai.ca>
- **ORAC – Ontario Refrigeration & Air Conditioning Association:** <https://orac.ca/>
- **HVAC Resources for training across the province:** <https://www.hvacrcareers.ca/site/common/Post-Secondary-Educational-Facilities-Offering-HVACR-Courses.html>
- **HVAC classes:** <https://www.hvacclasses.org/blog/how-to-become-hvac-technician>
- **CVAC-Quebec:** <http://cvac-quebec.net/compagnies/categorie/associations/>
- **Refrigeration and Air Conditioning Mechanic:** <https://tradesecrets.alberta.ca/trades-occupations/profiles/014/>
- **HVAC Training Schools:** <https://www.vocationalschools.ca/programs/hvac>



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